

## USGS-NPS Vegetation Mapping Program

### Isle Royale National Park

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#### **Betula alleghaniensis - (Acer saccharum, Picea glauca) Forest**

COMMON NAME	Yellow Birch - (Sugar Maple, White Spruce) Forest
SYNONYM	Yellow Birch - (White Spruce) Forest
PHYSIOGNOMIC CLASS	Forest (I)
PHYSIOGNOMIC SUBCLASS	Deciduous forest (I.B)
PHYSIOGNOMIC GROUP	Cold-deciduous forest (I.B.2)
PHYSIOGNOMIC SUBGROUP	Natural/Semi-natural (I.B.2.N)
FORMATION	Lowland or submontane cold-deciduous forest (I.B.2.N.a)
ALLIANCE	ACER SACCHARUM - BETULA ALLEGHANIENSIS - (FAGUS GRANDIFOLIA) FOREST ALLIANCE

CLASSIFICATION CONFIDENCE LEVEL 3

USFWS WETLAND SYSTEM TERRESTRIAL

#### RANGE

##### **Isle Royale National Park**

This community seems to be restricted to the southwest end of the park, near Windigo, Grace Harbor, and Feldtmann Lake.

##### **Globally**

This association is found in northern Michigan and Ontario.

#### ENVIRONMENTAL DESCRIPTION

##### **Isle Royale National Park**

This community occupies gentle to steep slopes at elevations from 630 to 780 feet. Soils are moderately well drained to rapidly drained sandy loams.

##### **Globally**

This community occupies gentle to steep slopes at elevations from 630 to 780 feet. Soils are moderately well drained to rapidly drained sandy loams (C. Reschke personal communication 1999).

#### MOST ABUNDANT SPECIES

##### **Isle Royale National Park**

<u>Stratum</u>	<u>Species</u>
Tree canopy	<i>Betula alleghaniensis</i> , <i>Picea glauca</i>
Short shrub	<i>Rubus parviflorus</i> , <i>Sorbus decora</i>
Forb	<i>Aralia nudicaulis</i> , <i>Cornus canadensis</i>

##### **Globally**

<u>Stratum</u>	<u>Species</u>
Tree canopy	<i>Betula alleghaniensis</i> , <i>Picea glauca</i>
Forb	<i>Aralia nudicaulis</i> , <i>Cornus canadensis</i>

#### CHARACTERISTIC SPECIES

##### **Isle Royale National Park**

*Betula alleghaniensis*, *Picea glauca*

##### **Globally**

*Betula alleghaniensis*, *Picea glauca*

#### VEGETATION DESCRIPTION

##### **Isle Royale National Park**

At Isle Royale NP, yellow birch - (spruce) forest is a closed canopy, deciduous forest. Canopy cover is usually about 70 to 80% (sometimes less); the most abundant trees are *Betula alleghaniensis* (20 to 60% cover), *Picea glauca* (5 to 50% cover) and *Betula papyrifera* (5 to 25% cover). This community is distinguished from Sugar maple - yellow birch - northern hardwood forest by the absence or very low cover of *Acer saccharum* in either the canopy or as seedlings and saplings in the groundlayer. There is often a subcanopy with 5 to 30% cover (same species as in the canopy). Cover of tall shrubs is about 5 to 10%; the most abundant tall shrubs are saplings of *Picea glauca* and *Abies balsamea*, and *Sambucus racemosa* (each with 1 to 5% cover). Cover of short shrubs varies from 10 to 70%; the most abundant short shrubs are *Rubus*

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*parviflorus* (5 to 25% cover), *Sorbus decora* (5 to 25% cover), *Diervilla lonicera* (5 to 25% cover), *Lonicera canadensis*, and *Rubus idaeus* (each with 1 to 5% cover). There is a sparse cover of dwarf shrubs, mainly *Rubus pubescens* (1 to 5% cover). Cover of herbs varies from 40 to 80%; the most abundant herbs are *Aralia nudicaulis* (5 to 25% cover), *Cornus canadensis* (5 to 25%), *Clintonia borealis*, *Lycopodium annotinum*, *Streptopus lanceolatus* var. *rosea*, *Athyrium filix-femina*, and *Oxalis montana* (each with 1 to 5% cover). Cover of nonvascular plants is sparse (0 to 10% cover); *Pleurozium schreberi* is characteristic but not abundant (less than 1% cover).

#### **Globally**

At Isle Royale NP, yellow birch - (spruce) forest is a closed canopy, deciduous forest. Canopy cover is usually about 70 to 80% (sometimes less); the most abundant trees are *Betula alleghaniensis* (20 to 60% cover), *Picea glauca* (5 to 50% cover) and *Betula papyrifera* (5 to 25% cover). This community is distinguished from Sugar maple - yellow birch - northern hardwood forest by the absence or very low cover of *Acer saccharum* in either the canopy or as seedlings and saplings in the groundlayer. There is often a subcanopy with 5 to 30% cover (same species as in the canopy). Cover of tall shrubs is about 5 to 10%; the most abundant tall shrubs are saplings of *Picea glauca* and *Abies balsamea*, and *Sambucus racemosa* (each with 1 to 5% cover). Cover of short shrubs varies from 10 to 70%; the most abundant short shrubs, with 5 to 25% cover, are *Rubus parviflorus*, *Sorbus decora*, and *Diervilla lonicera*. Less common are *Lonicera canadensis* and *Rubus idaeus*. There is a sparse cover of dwarf-shrubs, mainly *Rubus pubescens*. Cover of herbs varies from 40 to 80%; the most abundant herbs are *Aralia nudicaulis* and *Cornus canadensis* with > 5% cover. *Clintonia borealis*, *Lycopodium annotinum*, *Streptopus lanceolatus* var. *rosea*, *Athyrium filix-femina*, and *Oxalis montana* are less common (<5% cover). Cover of nonvascular plants is sparse (0 to 10% cover), but *Pleurozium schreberi* is characteristic (C. Reschke personal communication 1999).

#### OTHER NOTEWORTHY SPECIES

##### **Isle Royale National Park**

Information not available.

CONSERVATION RANK G?.

DATABASE CODE CEGLO05245

MAP UNITS 74

COMMENTS

REFERENCES